

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Lewis T. Babcock, Chief Judge

Criminal Case No. 06-CR-00342-LTB

UNITED STATES OF AMERICA,

Plaintiff,

v.

KENNETH DEAN STURM,

Defendant.

MEMORANDUM OPINION AND ORDER

Babcock, C.J.

The defendant, Kenneth Dean Sturm, was indicted of one count of possession of a firearm after conviction of a felony, 18 U.S.C. § 922(g)(1), and one count of possession of child pornography, 18 U.S.C. § 2252A(a)(5)(B). I previously severed the two counts to avoid undue prejudice and Mr. Sturm pled to the former. The latter count is predicated upon a photograph contained on a CD-ROM disc taken from Mr. Sturm's residence. Other computer media allegedly containing illicit pictures may comprise evidence admissible at trial under Fed. R. Evid. 404(b).

By his Motion for Order Directing the Government to Provide Copy of Evidence for Purposes of Independent, Confidential and Complete Examination by the Defense in the Exercise of Mr. Sturm's Constitutional and Statutory Rights, Mr. Sturm requests bit-by-bit copies of all computer-generated media, including discs and hard drives, containing evidence that the

Government intends to introduce at trial. The Government responds that copying is prohibited under the Adam Walsh Child Protection and Safety Act of 2006 (“Walsh Act”). I have the benefit of the parties’ briefs and evidence taken at a hearing on May 15, 2007. For the reasons stated below, I DENY the motion.

I. Findings of fact

The witnesses were notable both for their credibility and for their knowledge of the pertinent technologies and legal standards. Three agents of the United States Bureau of Immigrations and Customs Enforcement (“ICE”) testified for the Government. For Mr. Sturm Raymond Moore, the Federal Public Defender for the Districts of Colorado and Wyoming, testified.

A. Special Agent Anna Wells

ICE Special Agent Anna Wells averred that the photograph identified in the indictment depicts a child victim known to the Government; it was not generated by manipulation of computer media. Many other pictures contained in temporary internet folders within Mr. Sturm’s computers, which the Government intends to introduce under Rule 404(b), depict actual children, though the geneses of some pictures remain unknown.

Agent Wells testified that each digital picture possesses a “hash value,” a unique digital signature consisting of a series of letters and numbers, generated by a mathematical algorithm. Pictures of known child victims are identified primarily by their hash values, which are referenced against a database of known contraband. Identification is confirmed by visual comparison of the suspect photograph with known photographs.

Agent Wells stated that the Government has produced to Mr. Sturm's counsel all requested discovery except contraband depictions. Defense counsel received a copy of ICE's forensic report, which lists the pictures allegedly discovered on Mr. Sturm's hard drive and discs. Since passage of the Walsh Act, ICE has provided copies of prurient pictures to neither the United States Attorney's office nor defense counsel. This policy includes attorneys of the Federal Public Defender's office. Media remains in the custody of ICE and attorneys examine the pictures only in the presence of federal agents. In this case, Agent Wells brought a compact disc containing pictures to the Assistant United States Attorney for his examination before the commencement of grand jury proceedings, but did not allow the disc out of her possession and returned with it to the ICE office after the examination was complete.

On October 12, 2006, defense counsel, an Assistant Federal Public Defender, examined the photographs at the ICE office. The review lasted approximately ten minutes, occurred in an open cubicle, and was not restricted by any protective order. Defense counsel did not ask to be placed in a private room and had no questions for Agent Wells.

Defense counsel has not requested that ICE make the media available for a forensic evaluation at the ICE office. Agent Wells speculated that an evaluation by a defense expert would likely last "several hours." The expert would be given complete privacy in a secluded room if the expert signed a stipulation promising not to copy any of the pornographic depictions. Otherwise, the expert would conduct any analysis under the supervision of an ICE agent. Defense counsel in this case has not asked to establish a procedure by which any defense expert might examine the media at issue.

B. Senior Special Agent Richard Stoffregen

Senior Special Agent Richard Stoffregen, a Computer Forensic Examiner with ICE, described the process for creation of a digital duplication or copy, known as a “bit-by-bit image,” of original computer media. A bit-by-bit image enables forensic examiners to examine segments of data found on an original hard drive or other media source without altering the source. To obtain one, the examiner employs a write-block hardware device, which inhibits transfer of data to the source media, then acquires the data from the source and copies it onto a storage device, such as a second hard drive. Forensic analyses are then conducted on the bit-by-bit image contained within the second device. One such analysis involves employing software called “EnCase” to acquire and verify the hash values of any data in the bit-by-bit image.

Agent Stoffregen affirmed that, since enactment of the Walsh Act, ICE no longer produces to defense counsel or defense experts bit-by-bit images of computer media containing child pornography. Instead, ICE Agents make the bit-by-bit images available for inspection in a private room designated for the purpose, provided that the inspector signs a stipulation promising not to copy any contraband depictions. Defense experts may use either a stand-alone computer provided by ICE or their own computers, which they can connect to the hard drive. Standard forensic software, such as EnCase or a program called “VM Ware,” facilitates the forensic analyses most commonly undertaken – to verify that the bit-by-bit image is what it purports to be. In the unlikely event that defense experts do not have these software programs, ICE is able to provide them. The expert is given complete privacy in the room. ICE agents do not enter the room unless asked and do not attempt to discern what the defense expert is doing or has done. Agent Stoffregen makes himself available to answer questions and attempts to provide any

requested assistance.

Agent Stoffregen places no limit on the duration of any defense examination and makes the bit-by-bit image available for return visits. Defense experts are permitted to duplicate everything on bit-by-bit copies – registry files, hard drive data, Windows data, passwords, software contained on the hard drive and data concerning its use – the sole exception being contraband.

Twice since enactment of the Walsh Act Agent Stoffregen has followed this procedure to enable defense experts to review computer media. On one occasion a defense expert conducted analyses for two or three days. After business hours, he left his own computer running “automated processes” on ICE’s hard drive in the private room. Neither expert made any complaints to Agent Stoffregen about the availability of the bit-by-bit images or the process.

When a defense expert is located in another state, Agent Stoffregen sends the hard drive containing the bit-by-bit image to a police lab in that state, where the expert is given access. Twice he has sent hard drives to a police lab in Montana.

Agent Stoffregen was less than clear whether defense experts leave traces on ICE hardware during an examination, which might reveal to ICE agents strategies or theories of defense. He testified that review of bit-by-bit images on ICE’s stand-alone computer involves two hard drives. The hard drive containing the bit-by-bit image communicates with an operating system drive. The operating system drive records the expert’s activities – keyword searches, book marking, etc. – and stores any file folders that the expert creates during the examination. Agent Stoffregen conceded that, though these data can be erased, traces will remain in various locations on the operating system drive. Any marks made on the bit-by-bit image drive cannot be

eradicated without perceptibly altering the drive.

C. Senior Special Agent Patrick Redling

Senior Special Agent Patrick Redling, another Computer Forensic Examiner with ICE, testified that defense experts can avoid leaving any traces of their examinations and analyses by using their own lap top computers to perform the tasks and by saving all data on their own system drives. The only traces of such an examination on ICE's hardware are the dates and times on which the image drive was viewed.

Additionally, lap tops can be connected to an image drive by means of write-block hardware, which prevents all marking and alteration of the bit-by-bit image drive. If employed, the write-block hardware avoids even the identification of the date and time that the bit-by-bit image was viewed.

Agent Redling also explained that two bit-by-bit images are routinely duplicated from source media, on separate drives. This insures against corruption of the original. One bit-by-bit image is stashed in archives while the other is tested.

D. The Public Defender

Mr. Moore, before appointment to his current position, practiced for several years, among other capacities, as an Assistant Federal Public Defender in Colorado. For a ten-year period beginning in the early 1990's, he was the Assistant Federal Public Defender responsible for defending against child pornography prosecutions. This assignment resulted from his intimate familiarity with computer technology, then increasingly the media by which child pornography was shared and accessed.

Before enactment of the Walsh Act, Mr. Moore's office bound itself to restrictions upon

the handling of pornographic materials, including that the materials remained in a locked room, to which access was granted only for case preparation and forensic analysis. In this room is stored various computer evidence. Mr. Moore retains one key to the room and his administrative officer retains the other. Additionally, contraband media is secured in a locked filing cabinet within the locked room. Only he has a key to the filing cabinet. After conclusion of a case, he would return any and all bit-by-bit copies of media containing child pornography to the United States Attorney's office. The drive containing the bit-by-bit image would then be erased and returned to him. For certainty, he would then instruct his staff also to erase, or "wipe," the drive.

Mr. Moore testified that competent representation of a defendant charged with possession of child pornography requires, at a minimum, thorough examination of the media allegedly used and ready access to the media during trial preparation. The Walsh Act and the procedures that the Government has enacted in response to it are faulty, in his view, for two reasons.

First, access to the media during discovery is uneven; while the Government's agents and experts have continuous access to the bit-by-bit image and the original source media, he, his subordinates, and their experts must make special arrangements for discrete periods of time during which they might gain access in order to investigate. That Assistant United States Attorneys must also make special arrangements to view the media does not mollify him because the ICE agents to whose custody the media is entrusted under the Walsh Act are aligned with the prosecution and are likely, he speculated, to produce the media to prosecutors upon request. He took pains to refrain from accusing the Government of bad faith and disclosed no knowledge of unequal access in this case.

Second, Mr. Moore hypothesized that the Walsh Act impedes the effective assistance of

counsel during trial preparation. When preparing for a trial, defense counsel must have unfettered access to relevant, physical evidence. The analogy to other types of contraband-evidence that remains in the Government's possession, such as weapons or narcotics, is imperfect because analysis of computer media is far more complicated. Typically, evaluation of drugs (for example) involves only ascertaining its weight, chemical composition, and perhaps a couple of other attributes. Analysis of computer media, by contrast, may in various cases involve visual examination of the offending depictions, analysis of the unique digital properties of the pictures, ascertaining whether the pictures traveled in interstate commerce, determining whether the pictures have been altered or manipulated, and numerous other subjects of inquiry. Mr. Moore knew of no particular inquiries relevant to this case.

Other potential challenges might arise from limited resources. Mr. Moore has available one technology specialist and one computer designated for forensic examinations. He envisioned the impracticality of committing his specialist and equipment to a multi-day examination at the ICE office while trying to satisfy other demands upon the same resources. However, he identified no such dilemma in this case. (The Assistant Public Defender acknowledged during oral argument that resources for expert analyses are routinely applied for and allowed.) Mr. Moore conceded that certain security measures might enable his staff to leave a computer running overnight at the ICE office without jeopardizing work product.

Mr. Moore expressed doubt that one could observe the contraband images without creating copies of them; an unavoidable function of computers is that they store copies of data in numerous places so that, even when an original is closed or deleted, copies remain in the recesses of the machine. Significantly, however, he stopped short of asserting that no forensic evaluation

can avoid violating the statute.

Mr. Moore conceded that he knows little about the facts and issues of this case; he has not participated in the defense. He identified no difficulties in attaining access to the bit-by-bit image at issue here. He could not make an informed estimate of the time required for any forensic evaluation in this case. No one in his office had attempted to reach an accommodation with the Government. Indeed, he thought accommodation impossible; the only “equalizing accommodation” is to have unfettered access to a bit-by-bit copy of the media in his own office. In his view, no middle ground can be found that does not disadvantage the defense.

II. Conclusions of law

Mr. Sturm objects to the Government’s invocation of the Walsh Act, which *inter alia* provides that child pornography in a criminal proceeding must remain in the custody of the Government or the court and forbids duplication of the material when the Government has made the material reasonably available for inspection. The particular provision at issue states,

(1) In any criminal proceeding, any property or material that constitutes child pornography (as defined by section 2256 of this title) shall remain in the care, custody, and control of either the Government or the court.

(2)(A) Notwithstanding Rule 16 of the Federal Rules of Criminal Procedure, a court shall deny, in any criminal proceeding, any request by the defendant to copy, photograph, duplicate, or otherwise reproduce any property or material that constitutes child pornography (as defined by section 2256 of this title) so long as the Government makes the property or material reasonably available to the defendant.

(B) For the purposes of subparagraph (A), property or material shall be deemed to be reasonably available to the defendant if the Government provides ample opportunity for inspection, viewing, and examination at a Government facility of the property or material by the defendant, his or her attorney, and any individual the defendant may seek to qualify to furnish expert testimony at trial.

18 U.S.C. § 3509(m).

For the purposes of this motion, the parties do not dispute that the media of which Mr. Sturm seeks duplication and production contains child pornography, as that term is defined in 18 U.S.C. § 2256(8). Mr. Sturm has not for the purposes of my analysis here contradicted with credible evidence the Government's proffer that actual children are depicted in many, if not all, of the pictures. Therefore, no issue appears whether the pictures merely "convey the impression" of depicting "a minor child engaging in sexually explicit conduct," the possession of which Congress may not prohibit consistent with the First Amendment. *Ashcroft v. Free Speech Coalition*, 535 U.S. 234, 257-258, 122 S. Ct. 1389, 152 L. Ed. 2d 403 (2002).

A. Mr. Sturm's objections

Mr. Sturm's counsel laments that the Walsh Act obtrudes the long-standing practice by which criminal defense attorneys, as officers of the Court, historically obtained discoverable media under protective orders, imposing limitations upon defense counsels' dissemination and maintenance of the materials. Counsel argues that those limitations were sufficient to allay the concerns underlying the Walsh Act. I appreciate defense counsel's view that the Walsh Act is, at least in this district, a remedy in search of a defect and that it introduces an inherent imbalance in the parties' respective access to discoverable materials. However, I am charged not with assessing the efficacy of the statute but rather with determining whether it is constitutionally enacted and applied.

By Mr. Sturm's citations, by the specificity of his request, and by the evidence adduced at the hearing, it is clear that he envisions a conflict between the Walsh Act and his right to a full and fair defense under the Due Process Clause of the Fifth Amendment. Additionally, he argues that his perceived disadvantage impedes the effective assistance of counsel, in violation of the Sixth

Amendment. He does not assert that the Government has suppressed exculpatory evidence in violation of *Brady v. Maryland*, 373 U.S. 83, 83 S. Ct. 1194, 10 L. Ed. 2d 215 (1963). Nor does his motion raise Fourth Amendment concerns.

Less clear is whether Mr. Sturm challenges the statute as unconstitutional on its face or rather only as applied. His written motion presented an as-applied challenge. However, as the above recitation demonstrates, no evidence appeared of any problems any defense attorneys or experts have encountered examining the bit-by-bit image in ICE's custody. Indeed, it is undisputed that Mr. Sturm's counsel has not requested the availability of the image disc for an expert evaluation. And counsel conceded during oral argument that his claim might be understood as a facial challenge because the speculations on which his challenge rests invite me to look beyond the facts of this case.

The standards for facial and as-applied challenges are familiar. "A facial challenge to a legislative Act is, of course, the most difficult challenge to mount successfully, since the challenger must establish that no set of circumstances exists under which the Act would be valid." *United States v. Salerno*, 481 U.S. 739, 745, 107 S. Ct. 2095, 95 L. Ed. 2d 697 (1987). *But see*, *United States v. Castillo*, 140 F.3d 874, 879 (10th Cir.1998) (noting that the *Salerno* rule does not apply to facial challenges of abortion regulations and providing alternative reasoning in the interest of caution). Also, "where a statute is susceptible of two constructions, by one of which grave and doubtful constitutional questions arise and by the other of which such questions are avoided, [the Court's] duty is to adopt the latter." *Jones v. United States*, 529 U.S. 848, 857, 120 S. Ct. 1904, 146 L. Ed. 2d 902 (2000). A challenge to the Walsh Act as applied against Mr. Sturm consists of the question whether the Act constituted a legitimate exercise of Congress'

power over the conduct of discovery in this case. *See United States v. Grimmer*, 439 F.3d 1263, 1273 (10th Cir. 2006).

B. Due process

I begin with the challenge on due process grounds. I am not the first to mark this slate. Defendants in other districts have challenged the constitutionality of the Walsh Act, prompting thoughtful discussion from district courts of the issues involved. *See, e.g., United States v. O'Rourke*, 470 F. Supp. 2d 1049 (D. Ariz. 2007); *United States v. Johnson*, 456 F. Supp. 2d 1016 (N.D. Iowa 2006); *United States v. Knellinger*, 471 F. Supp. 2d 640 (E.D. Va. 2007). Two decisions in particular warrant close attention.

In the *O'Rourke* decision, the court rejected the defendant's constitutional challenges to the Walsh Act, both facially and as applied. It noted that the Act's prohibition of a defense team's possession of pornographic material is not absolute; Section 3509(m)(2)(A) forbids delivery only "so long as the Government makes the property or material reasonably available to the defendant." Subsection (2)(B) defines reasonable availability as "ample opportunity for inspection, viewing, and examination at a Government facility." The *O'Rourke* court concluded that the phrase "ample opportunity" could reasonably be understood to be coterminous with the requirements of due process and that any facial constitutional dilemma was thus avoided. *O'Rourke*, 470 F. Supp. 2d at 1055. Furthermore, the court, applying the mandate of Subsection (2)(B) to require as much access to the evidence as due process demands, concluded that the statute could not be unconstitutional as applied. *Id.*

The *Knellinger* court adopted the reasoning of *O'Rourke* and concluded for the same reasons that the Walsh Act is not facially unconstitutional. *Knellinger*, 471 F. Supp. 2d at 644-

645 & n.3. The court declined to declare the Walsh Act unconstitutional as applied because the Act permitted the court to remedy insufficiently ample opportunity to examine, rendering the as-applied challenge moot. *Id.* at 646. The court then noted that the defendant intended to assert a virtual-child defense under *Ashcroft* and considered the defendant's uncontroverted evidence that the forensic analysis requisite to that defense would prove unfeasible if conducted at a Government facility. *Id.* at 649. The court invoked Subsection (2) and ordered the Government to provide a mirror image of the media to defense counsel, subject to a protective order. *Id.* at 650. As noted above, no virtual child issues are implicated here.

I find the reasoning of *O'Rourke* and *Knellinger* persuasive. Mindful of my obligation to give the Walsh Act the reading most consistent with constitutional limitations, I conclude that the requirements of Subsections (2)(A) and (2)(B) are consistent, if not coterminous, with the due process guarantee that Mr. Sturm be afforded a "fair opportunity to defend against the [Government's] accusations." *Chambers v. Mississippi*, 410 U.S. 284, 294, 93 S. Ct. 1038, 35 L. Ed. 2d 297 (1973).

Nor has Mr. Sturm demonstrated that the requirements of Subsections (2)(A) and (2)(B) are inadequate to ensure due process in this case, so his as-applied challenge fails. Indeed, I am unable to discern with any precision actual or anticipated problems because Mr. Sturm has made no attempt to examine the bit-by-bit image or even to reach an accommodation with the Government. Instead, I confront hypothetical scenarios, equally likely (or unlikely) to arise in any case. Many of these speculative problems are superable; witnesses at the hearing offered possible solutions. The others raise no constitutional dilemma because I cannot discern how the Government is supposed to have infringed the Due Process Clause.

Mr. Sturm's argument boils down to an equation: reasonable availability equals possession of a bit-by-bit copy. This much defense counsel asserted at oral argument. The consequence of that equation is to write Subsection (2) out of the Act. For the reasons stated above, the Due Process Clause does not direct that result.

Mr. Sturm cites *Wardius v. Oregon*, 412 U.S. 470, 93 S. Ct. 2208, 37 L. Ed. 2d 82 (1973) for the proposition that the defense and the Government must have equal access to discoverable materials. In *Wardius*, the Supreme Court reversed a sanction prohibiting a defendant from introducing evidence in support of his alibi after he failed to comply with an Oregon notice-of-alibi rule that, on its face, made no provision for reciprocal discovery. The Court held that the Due Process Clause of the Fourteenth Amendment precludes enforcement of alibi rules unless attended by grants to criminal defendants of reciprocal discovery rights. *Wardius*, 412 U.S. at 472. The Court found particularly troubling that Oregon law made no provision requiring the state to reveal the names and addresses of witnesses it planned to use to refute an alibi defense. *Id.* at 475.

The Court reasoned, "Although the Due Process Clause has little to say regarding the amount of discovery which the parties must be afforded, ... it does speak to the balance of forces between the accused and his accuser." *Ibid* at 474 (citations omitted). The Court noted its particular suspicion of state trial rules that provide nonreciprocal benefits to the state "when the lack of reciprocity interferes with the defendant's ability to secure a fair trial." *Id.* at 474 n.6. It ruled

that in the absence of a strong showing of state interests to the contrary, discovery must be a two-way street. The State may not insist that trials be run as a "search for truth" so far as defense witnesses are concerned, while maintaining "poker game" secrecy for its

own witnesses. It is fundamentally unfair to require a defendant to divulge the details of his own case while at the same time subjecting him to the hazard of surprise concerning refutation of the very pieces of evidence which he disclosed to the State.

Id. at 475-476.

The imbalance that concerned the *Wardius* Court was therefore not any unequal distribution of access to evidence but those particular unequal distributions that enable the Government to obtain from defense counsel exculpatory evidence while shrouding refuting evidence in secrecy. No broader rule can be discerned. There exists no general constitutional right to pretrial discovery. *United States v. Higgins*, 75 F.3d 332, 335 (7th Cir. 1996); *United States v. Hernandez-Muniz*, 170 F.3d 1007, 1011 (10th Cir. 1999). Nor does due process necessarily require disclosure of evidence in a specific form or manner. *Id.*

Citing *Strickland v. Washington*, 466 U.S. 668, 104 S. Ct. 2052, 80 L. Ed. 2d 674 (1984) and *Ake v. Oklahoma*, 470 U.S. 68, 105 S. Ct. 1087, 84 L. Ed. 2d 53 (1985), Mr. Sturm argues that due process includes guaranteed access to and assistance of competent experts, who will investigate the case and prepare a defense. However, Mr. Sturm demonstrates neither that the Walsh Act forbids investigations by defense experts nor that he has been denied the assistance of competent experts in this case. *Compare, Johnson*, 456 F. Supp. 2d at 1020.

C. Effective assistance

Ineffective assistance of counsel consists of deficient performance by counsel falling below an objective standard of reasonableness and resulting in actual prejudice to the defendant. *United States v. Harms*, 371 F.3d 1208, 1211 (10th Cir. 2004). Mr. Moore's testimony demonstrated that defense access to media evidence will likely prove more costly and less convenient under the Walsh Act than under the old system. However, the increased cost and inconvenience does not

ipso facto render the assistance of counsel deficient, much less so deficient as to fall below an objective standard of reasonableness.

Accordingly, it is ORDERED that the motion [75] is DENIED.

Dated: May 17, 2007 in Denver, Colorado.

BY THE COURT:

s/Lewis T. Babcock
Lewis T. Babcock, Chief Judge